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THE EXTERMINATION OF FLIES

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THE EXTERMINATION OF FLIES.

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Continuation.
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We have learned during the last decade that the common house flies are not only a nuisance and a constant source of annoyance but are an actual menace to the public health. It has been shown that they are carriers of many disease germs, such as the germs of typhoid fever, dysentery, and tuberculosis. These germs are carried chiefly on the flies' legs but it has also been shown by experiment that they may live in the intestinal canal of the fly for several days. Owing to the fact that flies are hatched in, and feed largely on, filth where disease germs generally abound, every fly must be regarded as a dangerous visitor in the kitchen or dining room. You can never tell on what kind of infected filth the new-comer has just been feeding because in our small cities and villages, outhouses, sewer outlets and stable manure can be found in every neighborhood. It is especially in the unscreened outhouses and sewer outlets where the flies gather their most dangerous bacteria.

The biting stable fly has also been incriminated. It was shown last year that infantile paralysis can be transmitted from one monkey to another by the bite of this fly. It is as yet an unsettled question how frequently this disease is transmitted to man by this means, but the mere fact that it may thus be transmitted is sufficient cause for the extermination of these pests.

Civic leagues and health departments in general have for some time been carrying on a campaign against flies and everybody has become familiar with the slogan "Swat the fly." It his recently been pointed out, however, by Professor C. F. Hodge (Nature and Culture) that any campaign against these pests is hopelessly lost at the very beginning if our measures at eradication are only directed against those which are so intrusive as to enter our kitchen and dining room . If this campaign is to be carried out successfully, it must be carried on out of doors and must be directed especially toward the breeding places and against the earliest arrivals in the spring. We can not hope to get lasting results by swatting each fly that enters our homes if there is an open garbage can, manure pile or unscreened outhouse in our backyard where thousands are being hatched every day. Our attention must be directed toward these hatching places and toward the flies out of doors. This can be done in numerous ways.

All outhouses should be properly screened (see Figure 1) to keep flies from entering and depositing eggs which will soon be hatched and give rise to a fresh supply that seeks entrance into our homes.

Garbage must be placed into covered cans which are emptied twice a week, and not thrown into the alley or yard.

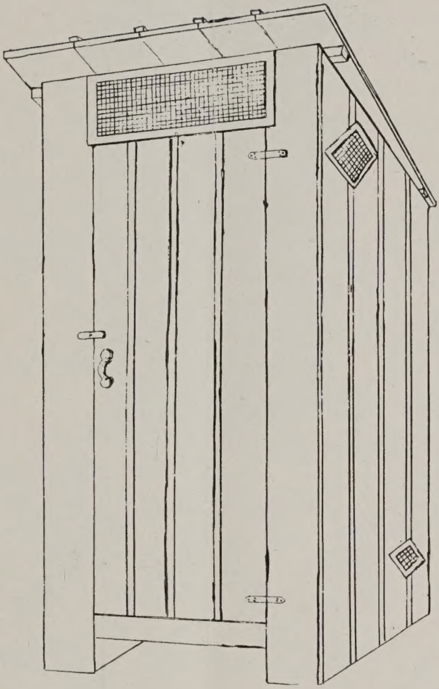
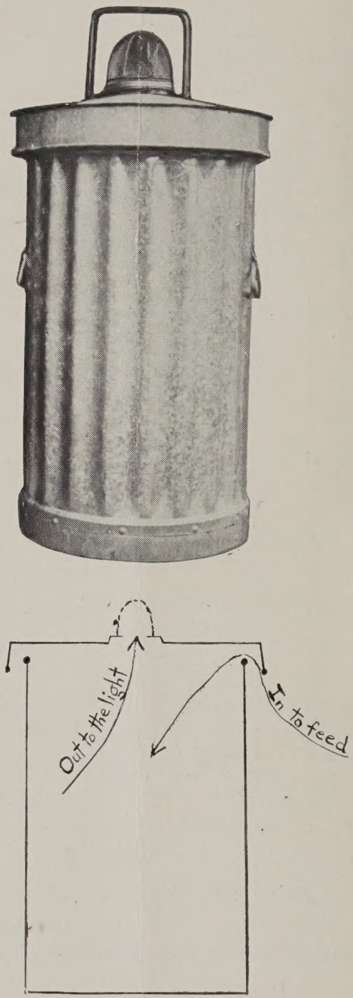


Figure 1.

A sanitary privy must be well built and screened to keep out flies. Flies infect their legs when allowed to feed on human excrement and are then in a position to infect our food.



Figures 2 and 3.

Showing construction of garbage can so as to serve as a fly trap. Note the cover handle over the fly trap, giving it protection when the cover is thrown off.

The garbage cans may be kept tightly covered and if the material which is deposited therein is free from flies' eggs, no flies can be hatched there. Very often, however, the cover is not put on tightly and flies get in to feed and deposit eggs, or the eggs may be laid in the garbage before it is put into the can. In either case, flies will be hatched in the can and escape when the cover is removed to put in more garbage. As garbage always attracts flies, Hodge conceived the idea of using cans with a very loosely fitting cover which permits them to go in and feed. (Figure III) In the top of the cover is a large hole over which is placed a fly trap as shown in Figure II. When they have satisfied themselves, they attempt to get out and in so doing are guided by the light that enters through the hole and, hence, go straight for the trap and are caught. In this manner, thousands of flies are attracted away from the kitchen windows and doors, never again to return.

Stable manure should be hauled away from the premises every day. This, however is often impracticable and, hence, the practice in some cities of keeping it in tightly covered wooden boxes where it is allowed to accumulate for a week or more before it is hauled away. It is well known that flies deposit their eggs in this material before it is placed in the box and, hence, the box is likely to become an excellent incubator for flies from which swarms are seen to escape every time the cover is opened. It has been recommended, therefore, that one or more fly traps be placed over holes in the top of the box as shown in Figure IV. As the flies are hatched and attempt to get away, they are guided by the light that enters through the hole and are caught in the trap. Stable manure when left exposed in the alley or barn-

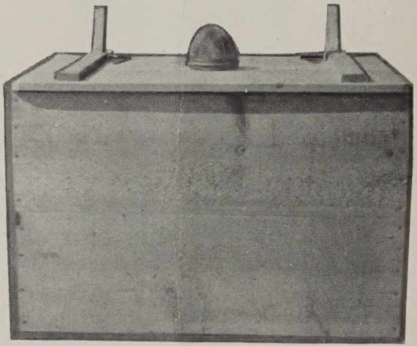


Figure 4.

A tightly covered wooden box for holding stable manure before it can be hauled away. A fly trap is fastened over a hole in the cover.

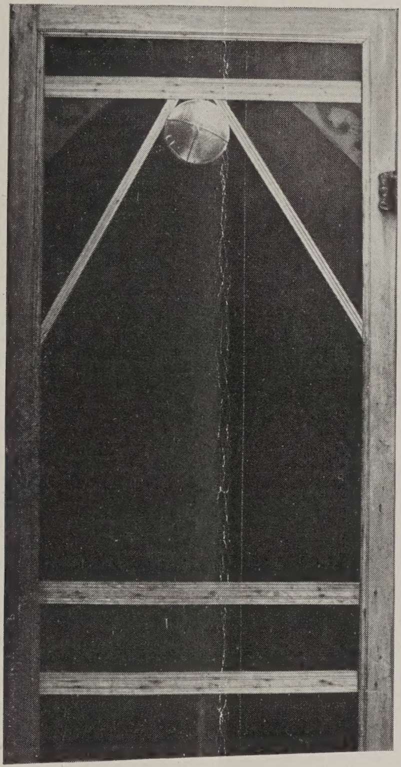


Figure 5

Fly trap fastened to the outside of a screen door. Note the guide strips which help to guide flies toward the trap.

yard is an ideal breeding place for flies of all kinds. In one such manure pile, millions of flies may be hatched in a summer. It is difficult to prevent their hatching because eggs are likely to be deposited in it while still in the barn, but it is not difficult to catch practically all that are hatched by keeping the manure in tightly covered boxes which are provided with fly traps, as shown above.

The kitchen door and windows always attract many flies and when food is being prepared within, the screens often are covered with them. Many of these can be caught in traps by a very simple device and are thus prevented from entering the kitchen when the door is opened. For this purpose it is only necessary to fasten small guide strips on the outside of the screen in such a manner that they converge at the top of the screen. (See Figure V). At the point where the guide strips come together is fastened a fly trap which will be found to do excellent work . Flies have a tendency to crawl upward on screens and, hence, the guide strips direct them to the traps. On having found their way to the trap they will soon be caught inside if the trap is properly baited with jelly or sugar. The traps may also be used effectively on the inner side of the screen door over a small hole in the screen, as well as anywhere else in the house. The important point, howver, is to catch the flies before they get into the house and especially at their feeding places in the yard and alley. It is very much more effective to begin this campaign early in the spring so as to catch the earliest arrivals before they have had an opportunity to lay eggs. In our state this campaign should be started in the latter part of April or in the beginning of May. When the traps are filled they are taken down and the flies killed by pouring boiling water over them.

Where there are stables with cows or horses, very effective work can be done with a window fly trap, as shown in Figure VI. This trap is very simple in construction and can be made by almost anybody who has at hand a few ordinary tools. It consists of a wooden frame with screens on each side. These screens are not straight but have two or three sharp folds running horizontally, as shown in the illustration. In the uppermost part of each fold are punched small round holes, two inches apart, and large enough for flies to enter. The top is removable so that the flies can be taken out after they have been killed with boiling water. If there are many flies in the stable, darken it by closing the door and hanging old sacks over all windows except the one that is provided with the fly trap. All flies in the stable will soon be found inside the trap.

If these very simple suggestions are carried out, you will not only have a flyless town but typhoid fever, dysentery and infantile paralysis will at the same time largely disappear. Typhoid fever and dysentery are diseases that are easily prevented and these few simple suggestions if properly carried out will do a great deal in helping to eradicate these diseases.

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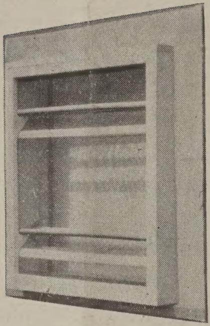

Figure 6.

Showing construction of a stable window fly trap. Small holes are punched in the screen in the upper part of the horizontal folds.

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